

US-PAT-NO: 5568224

DOCUMENT-IDENTIFIER: US 5568224 A

TITLE: System for setting data of a camera

----- KWIC -----

Detailed Description Text - DETX (5):

The electronic notebook 3 is capable of wide screen display based on a dot LCD and incorporates a communication function. The electronic notebook 3 described above is constructed of a microcomputer (hereinafter termed MCU) 30, an indicator 31 and a setting member 32. The electronic notebook 3 is not, unlike the data back unit 3, connected directly to the camera body 1 but can be, if communicable through a dedicated cable 4, set more multi-functionally than the data back unit 2. The MCU 30 has a serial communication terminal COM 3. The MCU 30 is connected via a contact 3b and the dedicated cable 4 to the camera body 1. Note that the data back unit 2 and the electronic notebook 3 are each attachable to and detachable from the camera body 1.

Details Text Image HTML KWIC

U	1	Document	Issue Dat	Pa	Current	Current XR	Title
1		US 5568224	1996102	14	396/300	396/301	System for setting
2		US 6527414	2003030	22	362/249	362/225	Backlight device
3		US 6181317	2001013	62	345/698	345/699	Display and methc

Details Text Image HTML

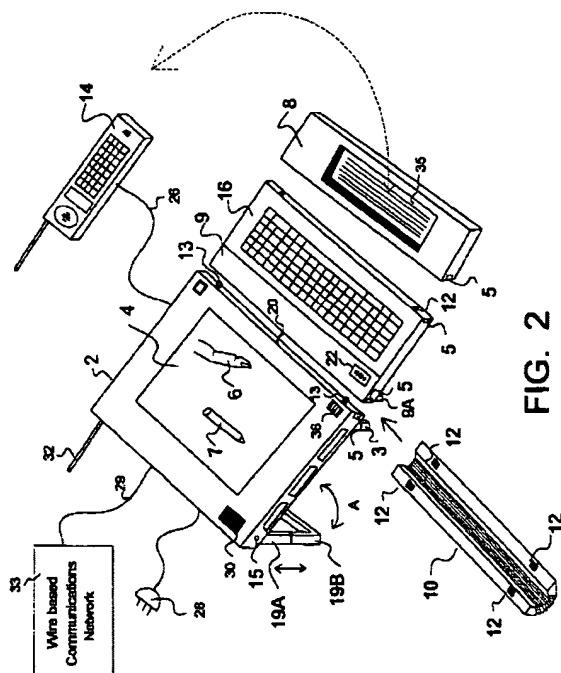


FIG. 2

US-PAT-NO: 5983073

DOCUMENT-IDENTIFIER: US 5983073 A

TITLE: Modular notebook and PDA computer systems for personal computing and wireless communications

----- KWIC -----

Brief Summary Text - BSTX (5):

There are several shortcomings with prior art notebook computers, PDAs and wireless telephone units. Notebook computers have a relatively large flat panel display device, a full alphanumeric keyboard and battery power. PDAs are small handheld units with a small LCD display, small key pad and touch pen. PDAs are designed to be placed in one's pocket or purse for maximum portability. A problem arises when customers desire large high resolution color display for both portable and desktop applications. To use a computer system for both portable and desktop uses, the customer must purchase multiple systems. The cost of color flat panels are still too expensive for most customers to buy two display monitors, one display for desktop and one for the portable applications. Many customers require functionality of a desktop computer, notebook computer and PDA, but it is much too expensive to purchase multiple CPUs, displays, and keyboards.

	U	1	Document I	Issue Dat	Pa	Current	Current XR	Tit
170	<input type="checkbox"/>	<input type="checkbox"/>	US 6259932	2001071	12	455/556	455/575	Hand-held telep
171	<input type="checkbox"/>	<input type="checkbox"/>	US 5625673	1997042	10	455/556	379/428.03	Modular commu
172	<input type="checkbox"/>	<input type="checkbox"/>	US 5956651	1999092	16	455/553	455/558	Cellular telephor
173	<input type="checkbox"/>	<input type="checkbox"/>	US 6427078	2002073	12	455/550	348/14.02	Device for pers
174	<input type="checkbox"/>	<input type="checkbox"/>	US 5664007	1997090	16	455/442	379/221.01	Method and app
175	<input type="checkbox"/>	<input type="checkbox"/>	US 5822692	1998101	30	455/419	340/7.54	Data communica
176	<input type="checkbox"/>	<input type="checkbox"/>	US 5826178	1998102	10	455/193.1	343/741	Loop antenna w
177	<input type="checkbox"/>	<input type="checkbox"/>	US 5983073	1999110	19	455/11.1	455/556	Modular notebo

5

the user is transporting or storing the portable computer assembly 10. As illustrated in FIG. 5, the outer casing 34 includes an access cover 38, the PCBA components 22 including, but not limited to the processing system, for controlling the operation of the portable computer assembly 10, and a PCBA shield 40 for electronically shielding the processing system and other PCBA components from the heat magnetic, and/or electrical interference generated by the operation of the various computer hardware components. Each of the above-identified elements of the portable computer assembly 10 within the outer casing 34 will now be described in further detail.

The removable access cover 38 includes the keyboard 24 positioned or formed therein for access by the manufacturer or repair technician for set-up and repair, such as memory add-ons, accessing, changing and/or repairing the peripherals, etc. The keyboard 24 can be a compact personal computer keyboard typically found on conventional portable computers or can be a custom size keyboard, depending on the needs and desires of the manufacturer and/or user and the size of keyboard 24 which can fit within the portable computer assembly 10. Furthermore, a completely functional pointing device 42, e.g., a mouse, a touch pad, a trackball, a joystick, etc., can be positioned adjacent the keyboard 24 to augment the user's ability to use the portable computer assembly 10. An external pointing device (not shown) can also be connected to the portable computer assembly 10 through an appropriate connection 44 to the portable computer system 10.

The access cover 38 further includes a cellular telephone receiving opening 46 for receiving the cellular telephone 16 in a snap-fit type or the like manner. The cellular telephone receiving opening 46 is preferably sized and shaped substantially equal to the size and shape of the cellular telephone 16 thereby securely releasably maintaining the relative position of the cellular telephone 16 within the cellular telephone receiving opening 46. The cellular telephone 16 can be a compact flip style cellular telephone which preferably includes a cellular telephone battery pack 48 and a cellular telephone antenna 50 and is operable by the user when either detached from the portable computer assembly 10 or seated within the cellular telephone receiving opening 46 formed in the outer casing 34.

As illustrated in FIG. 3, the cellular telephone receiving opening 46 includes at least one contact 54 electrically connected to a battery pack 52 (as illustrated in FIG. 5) within the portable computer assembly 10 of the present invention. The contacts 54 allow the cellular telephone 16 to be recharged during non-use of the cellular telephone 16 thereby insuring sufficient power for the cellular telephone 16 when used by the user of the portable computer system 10. Additionally, the contacts 54 allow the cellular telephone 16 to be powered by the power source of the computer system 12 when the cellular telephone 16 is used by the user. It should be noted that the cellular telephone 16 is preferably powered by a battery pack within the cellular telephone except when the cellular telephone battery pack has low power then the computer system power source or external power source powers the cellular telephone 16. Furthermore, the contacts 54 connect the antenna 50 of the cellular telephone 16 with the computer system antenna 60 and connects the signals processed by the cellular telephone 16 to the computer system 12, as will be described in further detail below.

The cellular telephone receiving opening 46 further includes an antenna connection 56 which connects the cel-

6

lular telephone 16 is received within the cellular telephone receiving opening 46. The antenna connection 56 includes a provision 58 for releasably contacting the cellular telephone antenna 50 of the cellular telephone 16 and assisting in releasably maintaining the cellular telephone 16 in the cellular telephone receiving opening 46. Furthermore, the antenna connection 56 connects to a computer system antenna 60 (as illustrated in FIG. 4) either attached to or molded into the closable lid 36 for providing a better signal between the cellular telephone 16 and a local cellular telephone tower (not shown) or satellite (not shown). The computer system antenna 60 in the closable lid 36 will be discussed in further detail below.

Now referring back to FIG. 5, the PCBA components 22 are mounted directly under the access cover 38 nearlying adjacent the keyboard 24 and the pointing device 42. A PCBA shield 40 is then positioned adjacent, under, and/or over the PCBA components 22 to shield the PCBA components 22 from heat, magnetic, and electrical interference generated by the various computer hardware components positioned beneath the PCBA shield 40. The PCBA shield 40 will shield the components of the portable computer system 10 as necessary, e.g., above, below, or around the PCBA components.

The various computer hardware components include, but are not limited to, the CD ROM/floppy disk drive 28, the rechargeable battery pack 52, the hard disk drive 26, and a the PCMCIA drive 30 for receiving at least one PCMCIA card 32. The PCBA components 22 controls the functions of the portable computer system 10 including, but not limited to, the operation of the keyboard 24, the pointer device 42, the cellular telephone 16, the printer device 18, the paper tray 20, the various computer hardware components, an external printer (not shown), I/O ports (similar to those I/O ports found on conventional desktop and laptop computers, i.e., serial ports, parallel ports, video ports, etc., power management, memory management, etc.). It should be noted that the arrangement and/or inclusion of certain computer hardware components can be different than illustrated depending on the needs and desires of the manufacturer and/or user.

The rechargeable battery pack 52 of the computer system 12 is preferably, but not necessarily, an extended life battery to power the functions of the computer system 12, the printer device 18, the paper tray 20, the cellular telephone 16, etc., when external power is not available. In a preferred embodiment, the inventor of the present invention envisions the battery pack 52 having a life of approximately three (3) to approximately four (4) hours with mostly computer use and a life of approximately one (1) to approximately two (2) hours with computer use and intermittent printer device use. These approximate time limits are merely estimates of battery pack life and could be increased depending on the size, type, and capacity of the battery pack 52.

The PCBA shield 40 includes a cover hinge 62 for hingedly connecting the PCBA shield 40 to the outer casing 34. A handle 64 on the PCBA shield 40 facilitates the lifting and rotation of the PCBA shield 40 about the cover hinge 62 to provide access to the manufacturer to the various computer hardware components positioned within the outer casing 34 under the PCBA shield 40. Additionally, it is within the scope of the present invention to mount certain hardware components, i.e., the floppy/CD ROM drive 28, through the side of the outer casing 34 in order to provide access to the user to the various hardware components.

Furthermore, it is further within the scope of portable

U.S. Patent

Apr. 17, 2001

Sheet 3 of 6

US 6,219,227 B1

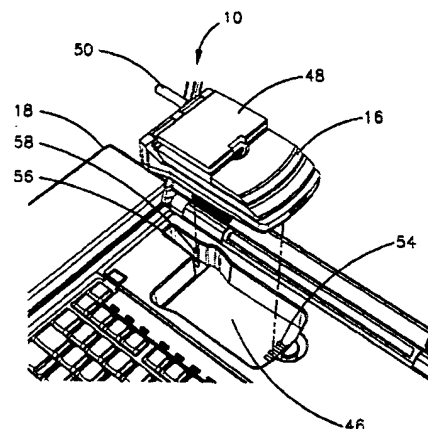


Figure 3

Details View Image HTML Full

	U	1	Document#	IssueDat	Pa	Current	CurrentXR	Tit
296	<input type="checkbox"/>	<input type="checkbox"/>	US 6288893	2001091	10	361/683	312/223.2	Desktop compu
297	<input type="checkbox"/>	<input type="checkbox"/>	US 6282084	2001082	12	361/683	108/115	Transportable s
298	<input type="checkbox"/>	<input type="checkbox"/>	US 6259597	2001071	11	361/683	345/169	Portable electro
299	<input type="checkbox"/>	<input type="checkbox"/>	US 6256193	2001070	40	361/683	248/922	Vertical docking
300	<input type="checkbox"/>	<input type="checkbox"/>	US 6256192	2001070	13	361/683	312/223.2	Accordion-fold l
301	<input type="checkbox"/>	<input type="checkbox"/>	US 6249427	2001061	12	361/683	361/686	Wearable comp
302	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 6219227	2001041	13	361/683	312/223.2	Portable compu
303	<input type="checkbox"/>	<input type="checkbox"/>	US 6205021	2001032	10	361/683	345/167	Method for oper

Details View Image HTML Full